

Remarks

Claims 1, 7, 8, and 27 are rejected in the Office Action. Applicants have amended Claim 1 and cancelled Claim 27. Upon entry of the Amendments Claims 1, 7, and 8 remain pending.

Support for the amendment to claim 1 is found in the specification as originally filed. Applicants respectfully request entry of the Amendments.

REJECTIONS UNDER 35 U.S.C. § 103

Claims 1, 7, 8, and 27 stand rejected under 35 U.S.C. § 103(a) as being unpatentable over Sangodkar, Lemmo, Newman, and Trojanowicz. The Office Action uses Sangodkar as a kind of primary reference, and then cites Lemmo, Newman, and Trojanowicz for various propositions that add elements to the disclosure of Sangodkar so as to make the invention as a whole obvious. Applicants respectfully traverse the rejection as applied to the amended claims and request reconsideration.

For a rejection under § 103 to be sustained over a combination of references, the references when combined must teach or suggest each and every limitation of the claims. Furthermore, there must be a motivation to combine the references outside the teachings of the current application. Just because references can be combined, the combination is not obvious unless there is a teaching that such combination would be desirable.

In particular, it is improper to use the current application as a roadmap to piece together various teachings of the prior art to arrive at the subject matter of the claims. That is to say, an invention is not obvious if the only motivation for combination of the references is to be found in the application at issue.

Applicants respectfully submit that the primary reference (Sangodkar) is not properly combinable with the secondary references in the ways suggested by the Examiner. Sangodkar prepares an array of microelectrodes by depositing a film forming material with a syringe. Electroconductive polymer is formed by electrodeposition during potential cycling between -0.2 and +0.8 volts both vs. SCE. The syringe is equipped with counter and reference electrodes to provide for the potential cycling. The method of Sangodkar relies on there being contact between the microelectrode and a drop pendent from the syringe during the electrodeposition and the cycling.

It is axiomatic that if modifying a reference would lead to its inoperability, then there is no motivation for the modification and a *prima facie* case of obviousness is not made out. In the current case, the electrodeposition and potential cycling of Sangodkar would be lost if the film forming solution were to be deposited by ink-jet methods instead of by the disclosed syringe methods. The Sangodkar reference thus teaches away from using an ink-jet process; the only motivation for modifying Sangodkar by providing an ink-jet method is then seen to be provided only in the Applicants' current specification.

The other secondary references cited by the Examiner are similarly deficient at providing motivation to modify Sangodkar. For example, Newman makes a two-dimensional array of electrodes by ink-jet printing and does not disclose depositing a film forming material. Lemmo is similarly inapt. It is directed toward filling wells in a 48 x 48 array molded in a polypropylene sheet. It suggests filling the wells with an ink-jet process and states the ink-jet process is advantageous over a syringe because of low costs and the like. But Lemmo does not deal with making a biosensor; it merely refers to Newman for the proposition that ink-jet methods are

known to be useful in other areas. Applicants respectfully submit the person of skill in the art would not combine Sangodkar and Lemmo.

Even if the references are properly combinable in spite of the discussion above, the references when combined do not contain all of the limitations of the current claims. For example, none of the references discloses the claimed viscosity of three centipoise or less. It is true that products of identical chemical composition cannot have mutually exclusive properties and that a chemical composition and its properties are inseparable. But Applicants respectfully submit that none of the references teach or suggest ink-jet printing a solution of a film forming material as recited in the claims. In this light, it is seen that the teaching that the film forming material solution have a viscosity of three centipoise or less is found only in the current application. Because the references when combined do not contain all of the limitations of the claims, the claims as amended are patentable over the cited references.

AMENDMENT TO CLAIM 1

Claim 1 has been amended to remove polypyrrole from the list of electroconductive polymers and to correct the spelling of polythiophene. Amended claim 1 is patentable over the cited references for the reasons discussed above and for the further reason that none of the references teach or suggest an electroconductive polymer comprising polymethylpyrrole, polythiophene, polymethylthiophene, or polyphenylene vinylene. Accordingly, Applicants respectfully request that the rejection be withdrawn.

CONCLUSION

For the reasons discussed above, Applicants believe the claims are in a state if allowance and respectfully request an early notice of allowance. Alternatively, Applicants respectfully request an Advisory Action stating whether the remarks and amendments can be considered at this time. The Examiner is invited to telephone the undersigned representative of Applicants if that would be helpful to resolving any issues.

Dated: _____

Nov 24, 2004

Respectfully submitted,

By: _____

G. Gregory Schivley
G. Gregory Schivley

Reg. No. 27,382

Bryant E. Wade

Reg. No. 40,344

Attorneys for Applicant

HARNES, DICKEY & PIERCE, P.L.C.
P.O. Box 828
Bloomfield Hills, Michigan 48303
(248) 641-1600

GGs/BEW/MAF/cg